Table C-14. Minimum PM_{10} Monitoring Requirements

(Table D-4 of Appendix D to Part 58— PM_{10} Minimum Monitoring Requirements (Approximate Number of Stations Per MSA)[1])

Population Category	High concentration[2]	Medium concentration[3]	Low concentration[4,5]
>1,000,000	6-10	4-8	2-4
500,000-1,000,000	4-8	2-4	1-2
250,000-500,000	3-4	1-2	0-1
100,000-250,000	1-2	0-1	0

[1] Selection of urban areas and actual numbers of stations per area will be jointly determined by EPA and the State agency.
[2] High concentration areas are those for which ambient PM_{10} data show ambient concentrations exceeding the PM_{10} NAAQS by 20 percent or more.
[3] Medium concentration areas are those for which ambient PM_{10} data show ambient concentrations exceeding 80 percent of the PM_{10} NAAQS.
[4] Low concentration areas are those for which ambient PM_{10} data show ambient concentrations less than 80 percent of the PM_{10} NAAQS.
[5] These minimum monitoring requirements apply in the absence of a design value.

Minimum PM_{10} monitoring requirements for Pennsylvania MSAs are detailed in Table C-15. Ambient air monitoring sites operated by agencies other than DEP are listed in the "Other SLAMS Monitors" column of the table. As shown, the number of PM_{10} monitoring sites within the remaining Pennsylvania MSAs meets or exceeds the minimum monitoring requirement.

Table C-15. PM_{10} Minimum Monitoring Requirements Demonstration, 2020-2021

MSA	2018 Population Estimate	2018 Max 24-hr Average	Monitoring Requirement Range	DEP SLAMS Monitors	Other SLAMS Monitors	Total No. of Monitors	Addt'l Monitors Needed
Allentown-Bethlehem-Easton MSA	842,913	42	1 - 2	1		1	0
Altoona MSA	122,492	No monitors	0	0		0	0
Bloomsburg-Berwick MSA	83,696	No monitors	0	0		0	0
Chambersburg-Waynesboro MSA	154,835	No monitors	0	0		0	0
East Stroudsburg MSA	169,507	No monitors	0	0		0	0
Erie MSA	272,061	33	0 - 1	1		1	0
Gettysburg MSA	102,811	No monitors	0	0		0	0
Harrisburg-Carlisle MSA	574,659	36	1 - 2	1		1	0
Johnstown MSA	131,730	35	0	1		1	0
Lancaster MSA	543,557	39	1 - 2	1		1	0
Lebanon MSA	141,314	No monitors	0	0		0	0
New York-Newark-Jersey City MSA	19,979,477	42	2 - 4	0	NJ-2; NY-3	5	0

MSA	2018 Population Estimate	2018 Max 24-hr Average	Monitoring Requirement Range	DEP SLAMS Monitors	Other SLAMS Monitors	Total No. of Monitors	Addt'l Monitors Needed
Philadelphia-Camden-Wilmington MSA	6,096,372	49	2 - 4	0	AMS-1; NJ-1	2	1
Pittsburgh MSA	2,324,743	107	2 - 4	1	ACHD-8	9	0
Reading MSA	420,152	No monitors	0 - 1	0		0	0
Scranton-Wilkes-Barre-Hazleton MSA	555,485	37	1 - 2	1		1	0
State College MSA	162,805	No monitors	0	0		0	0
Williamsport MSA	113,664	No monitors	0	0		0	0
York-Hanover MSA	448,273	No monitors	0 - 1	0		0	0
Youngstown-Warren-Boardman MSA	538,952	54	1 - 2	0	OH-3	3	0

Lead (Pb) Network Design Requirements

Minimum lead monitoring requirements are set forth in 40 CFR Part 58, Appendix D as follows:

"4.5 Lead (Pb) Design Criteria. (a) State and, where appropriate, local agencies are required to conduct ambient air Pb monitoring near Pb sources which are expected to or have been shown to contribute to a maximum Pb concentration in ambient air in excess of the NAAQS, taking into account the logistics and potential for population exposure. At a minimum, there must be one source-oriented SLAMS site located to measure the maximum Pb concentration in ambient air resulting from each non-airport Pb source which emits 0.50 or more tons per year and from each airport which emits 1.0 or more tons per year based on either the most recent National Emission Inventory [https://www.epa.gov/air-emissions-inventories] *or other scientifically justifiable methods and data (such as improved emissions factors or site-specific data) taking into account logistics and the potential for population exposure.*

[…]

(ii) The Regional Administrator may waive the requirement in paragraph 4.5(a) for monitoring near Pb sources if the State or, where appropriate, local agency can demonstrate the Pb source will not contribute to a maximum Pb concentration in ambient air in excess of 50 percent of the NAAQS (based on historical monitoring data, modeling, or other means). The waiver must be renewed once every 5 years as part of the network assessment required under § 58.10(d)."

Table C-16 displays previously identified 0.5 tpy or greater lead sources in Pennsylvania, outside of Allegheny and Philadelphia Counties, along with their correlating DEP lead monitoring sites. Site locations were chosen in accordance with 40 CFR Part 58, Appendix D, based on conservative dispersion modeling, and approved by EPA Region III.

Table C-16. Lead Sources Greater Than 0.5 Tons Per Year and DEP Lead Monitoring Sites

County	Facility Name	Emissions, in tons per year					DEP Lead Monitoring Site
		2014	2015	2016	2017	2018	
Beaver	Horsehead Corp/Monaca Smelter	1.47	(facility idle)	(facility closed)	(facility closed)	(facility closed)	Beaver Valley
							Vanport
Beaver	Firstenergy Gen LLC/Bruce Mansfield Plt	0.55	0.30	0.30	0.17	0.08	Potter Township*
Berks	East Penn Mfg Co Inc/Battery Assembly	1.71	1.28	1.52	1.32	1.26	Lyons Boro
							Lyons Park
Berks	Exide Tech/Reading Smelter	(facility idle)	(facility idle)	(facility idle)	(facility idle)	(facility idle)	Laureldale North
							Laureldale South
Carbon	Horsehead Corp/Palmerton	1.94	1.81	1.85	0.99	1.01	Palmerton
Indiana	Genon NE Mgmt Co/Conemaugh Plt	0.11	0.11	0.10	0.11	0.05	Conemaugh
Lancaster	Mt Joy Wire Corp/Mt Joy	0.52	0.52	0.51	0.50	0.50	Mt Joy
Lawrence	Inmetco/Ellwood City	0.05	0.05	0.06	0.03	0.00	Ellwood City

* DEP plans to discontinue the Potter Township site, as described in the "Modifications to Criteria Pollutant Networks" section of its 2019 Annual Network Plan.

Siting Criteria Requirements – 40 CFR Part 58, Appendix E

DEP operates all SLAMS sites in its Ambient Air Monitoring Network in accordance with all siting criteria requirements set forth in 40 CFR Part 58, Appendix E, "Probe and Monitoring Path Siting Criteria for Ambient Air Quality Monitoring." DEP has instituted a 5-year statewide site survey plan (corresponding with the 5-year network assessment) that examines many aspects of the site, including siting criteria. Siting criteria are also re-checked when site operators or field supervisors report construction or other activities that may impact air monitoring at the site.

Appendix D – Pennsylvania Monitoring Network Site Details

Appendix D of this document provides a detailed description of the existing monitoring network sites. This appendix includes information related to the location of the site, monitoring parameters at the site, and details about the monitors themselves in order to meet the requirements of 40 CFR Sections 58.10 (a) and 58.10 (b). Unless otherwise indicated, all criteria pollutant sites and monitors meet siting requirements set forth in of 40 CFR Part 58, Appendices A, C, D, and E. Meteorological equipment at monitoring sites are installed as an adjunct to pollutant monitoring only. As such, this equipment may not meet all siting criteria or quality assurance criteria intended for required meteorological monitoring.

Table D-1 below provides details on the methods and instrumentation utilized by DEP's Air Quality Monitoring Division for all criteria and toxic pollutant monitoring. DEP utilizes Federal Reference Methods (FRM) and Federal Equivalent Methods (FEM) in its monitoring network for criteria pollutants. Although there are no national concentration standards for air toxic pollutants, DEP uses approved EPA analytical methods to determine ambient concentrations.

Table D-1. Ambient Air Monitoring Equipment and Methods

PARAMETER	MANUFACTURER/INSTRUMENT/MODEL	EPA METHOD DESIGNATION
Continuous Gaseous Sampling		
OZONE	Teledyne Advanced Pollution Instrumentation, Model T400 Photometric Ozone Analyzer	Automated Equivalent Method: EQOA-0992-08757 FR 44565, 9/28/9263 FR 31992, 6/11/9867 FR 57811, 9/12/02 Latest Modifications: 08/2010; 05/2013; 07/2014; 9/2015
SO_2	Teledyne Advanced Pollution Instrumentation, Model T100 UV Fluorescence SO_2 Analyzer	Automated Equivalent Method: EQSA-0495-10060 FR 17061, 4/4/95 Latest Modifications: 08/2010; 05/2013; 07/2014; 9/2015:
$NO/NO_2/NO_x$	Teledyne Advanced Pollution Instrumentation, Model T200 Chemiluminescence Nitrogen Oxides Analyzer for Ambient Concentrations	Automated Reference Method: RFNA-1194-09959 FR 61892, 12/2/94 Latest modifications: 03/2009; 08/2010; 10/2012; 5/2013; 06/2014 ;07/2014; 9/2015
CO	Teledyne Advanced Pollution Instrumentation, Model T300 CO Gas Filter Correlation Analyzer	Automated Reference Method: RFCA-1093-09358 FR 58166, 10/29/93 Latest Modifications: 08/2010; 05/2013; 07/2014; 9/2015:
Particulate Sampling		
$PM_{2.5}$ (Discrete)	Thermo Fisher Scientific Partisol® 2025i Sequential $PM_{2.5}$ Air Sampler with a BGI VSCC™	Manual Reference Method: EQPM-0202-145 67 FR 15567, 4/2/02 Latest modification: 06/2011
$PM_{2.5}$ (Continuous)	Teledyne Advanced Pollution Instrumentation, Model 602 BetaPLUS Particle Measurement System	Automatic Equivalent Method EQPM-0912-204 77 FR 60985, 10/5/2012
	Teledyne Advanced Pollution Instrumentation, Model T640, PM Mass Monitor	Automated Equivalent Method EQPM-0516-236 81 FR 45285, 07/13/2016

PARAMETER	MANUFACTURER/INSTRUMENT/MODEL	EPA METHOD DESIGNATION
$PM_{2.5}$ SPECIATION	Met One Instruments SASS $PM_{2.5}$ Ambient Chemical Speciation Air Sampler URG Corporation 3000N Sequential Particulate Speciation System	None
PM_{10}	Thermo Scientific TEOM® 1400AB/TEOM® 1405 Continuous Ambient Particulate Monitor	Automated Equivalent Method: EQPM-1090-079 55 FR 43406, 10/29/90 Latest modification: 12/2008
LEAD	Tisch TE-5170 VFC+ Analysis by Inductively Coupled Plasma - Mass Spectrometry	Manual Equivalent Method EQL-0710-192 75 FR 45627, 8/3/10
METALS (PM_{10}–based)	Thermo GMW PM_{10} High-Volume Air Sampler - Volumetric Model SA/G1200	Manual Reference Method: RFPS-1287-063 52 FR 45684, 12/01/87 53 FR 1062, 1/15/88
METALS (TSP-based)	Thermo GMW TSP High-Volume Air Sampler - Volumetric Flow Controlled Inductively Coupled Plasma - Mass Spectrometry (Metals)	Manual Reference Method Code 802 47 FR 54912, 12/6/82 48 FR 17355 4/22/83 EPA Compendium Method IO-3.5
Other Toxic Sampling		
VOC	ATEC Model 2200-12 ATEC Model 2200-22	EPA Compendium Method TO-15
CARBONYLS	ATEC Model 2200	EPA Compendium Method 8315A
Meteorological Parameters*		
AMBIENT TEMPERATURE	Met One AIO2 All In One Weather Sensor	None
BAROMETRIC PRESSURE		
PRECIPITATION		
RELATIVE HUMIDITY		
SOLAR RADIATION		
WIND SPEED & DIRECTION		

*Note: DEP is in the process of expanding and upgrading the meteorological equipment installed at its monitoring sites. The start dates for meteorological equipment listed on the following pages reflect the start dates for upgraded equipment.

SITE NAME: **ALLENTOWN**

AQS ID: **420770004**

CBSA: **Allentown-Bethlehem-Easton MSA**

COUNTY: **LEHIGH**

MUNICIPALITY: **CITY OF ALLENTOWN**

LATITUDE: **40.61194445**

LONGITUDE: **-75.43261111**

ADDRESS: **STATE HOSPITAL REAR 1600 HANOVER AVE**

COMMENTS: **Meets federal monitoring requirements in the Allentown-Bethlehem-Easton MSA**

Monitor Summary

Monitor	*Network*	*Start Date*	*Frequency*	*Method Description*	*Monitoring Scale*	*Appendix D Objectives*
Ozone	SLAMS	1/1/1984	Continuous	UV Absorption	Neighborhood	Population Exposure
$PM_{2.5}$	SLAMS	1/1/2016	Continuous	Scattered Light Spectrometry	Neighborhood	Source Oriented
PM_{10}	SLAMS	5/16/1996	Continuous	TEOM Gravimetric	Neighborhood	Population Exposure
Meteorology	Other	8/15/2019	Continuous	Met One AIO2	N/A	N/A

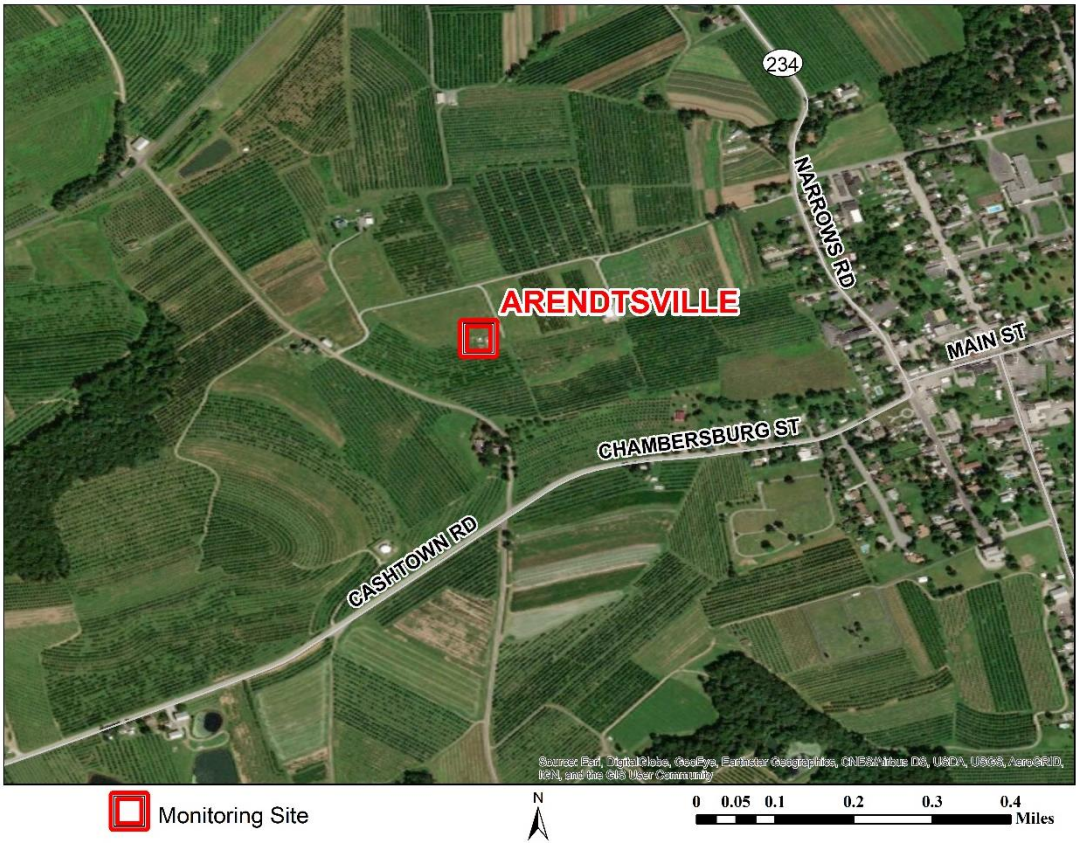
SITE NAME: **ALTOONA**

AQS ID: **420130801**
CBSA: **Altoona MSA**
COUNTY: **BLAIR**
MUNICIPALITY: **LOGAN TWP**
LATITUDE: **40.53563889**
LONGITUDE: **-78.37036111**
ADDRESS: **2ND AVE & 7TH ST**
COMMENTS: **Monitors for NAAQS compliance for criteria pollutants in Altoona MSA**

Monitor Summary

Monitor	*Network*	*Start Date*	*Frequency*	*Method Description*	*Monitoring Scale*	*Appendix D Objectives*
Ozone	SLAMS	5/1/1978	Continuous	UV Absorption	Urban Scale	Max Ozone Concentration
SO_2	SLAMS	5/1/1978	Continuous	UV Fluorescence	Neighborhood	Population Exposure
$PM_{2.5}$	SLAMS	6/1/2010	Continuous	Scattered Light Spectrometry	Neighborhood	Population Exposure
Meteorology	Other	New 2020	Continuous	Met One AIO2	N/A	N/A

SITE NAME: **ARENDTSVILLE**
AQS ID: **420010001**
CBSA: **Gettysburg MSA**
COUNTY: **ADAMS**
MUNICIPALITY: **FRANKLIN TWP**
LATITUDE: **39.92330556**
LONGITUDE: **-77.30816667**
ADDRESS: **WINDING ROAD, BIGLERVILLE**
COMMENTS: **Monitors regional transport of pollutants into eastern PA**



Monitor Summary

Monitor	*Network*	*Start Date*	*Frequency*	*Method Description*	*Monitoring Scale*	*Appendix D Objectives*
Ozone	SLAMS	11/1/2014	Continuous	UV Absorption	Regional Scale	Regional Transport
SO_2	SLAMS	10/6/2014	Continuous	UV Fluorescence	Urban Scale	General/Background
NO_2	SLAMS	6/24/1997	Continuous	Chemiluminescence	Urban Scale	General/Background
CO	SLAMS	6/24/1997	Continuous	Non-dispersive Infrared	Neighborhood	General/Background
$PM_{2.5}$	SLAMS	7/1/2009	Continuous	Scattered Light Spectrometry	Regional Scale	General/Background
$PM_{2.5}$ Speciation	CSN	1/1/2002	1 in 6	Gravimetric	Urban Scale	General/Background
VOC	Other	6/2/1997	1 in 6	Canister	N/A	N/A
Carbonyls	Other	6/2/1997	1 in 6	DNPH - Coated Cartridges	N/A	N/A
Meteorology	Other	New 2020	Continuous	Met One AIO2	N/A	N/A

SITE NAME: **BEAVER FALLS**

AQS ID: **420070014**

CBSA: **Pittsburgh MSA**

COUNTY: **BEAVER**

MUNICIPALITY: **CITY OF BEAVER FALLS**

LATITUDE: **40.74780556**

LONGITUDE: **-80.31575**

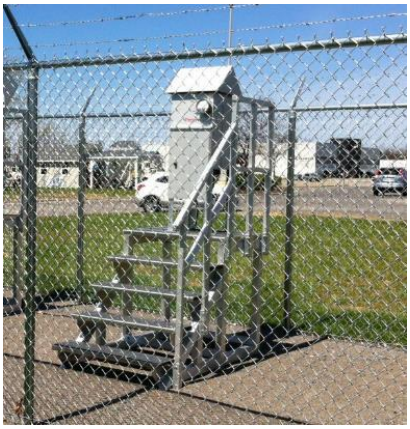
ADDRESS: **EIGHTH STREET AND RIVER ALLEY**

COMMENTS: **Monitors for NAAQS compliance for criteria pollutants**

Monitor Summary

Monitor	*Network*	*Start Date*	*Frequency*	*Method Description*	*Monitoring Scale*	*Appendix D Objectives*
Ozone	SLAMS	1/1/1974	Continuous	UV Absorption	Urban Scale	Population Exposure
NO_2	SLAMS	1/1/1974	Continuous	Chemiluminescence	Neighborhood	Population Exposure
$PM_{2.5}$	SLAMS	12/1/1999	Daily	Gravimetric	Neighborhood	Population Exposure
$PM_{2.5}$	SLAMS	7/16/2004	Continuous	Scattered Light Spectrometry	Neighborhood	Population Exposure
PM_{10}	SLAMS	9/20/1995	Continuous	TEOM Gravimetric	Neighborhood	Population Exposure
Meteorology	Other	1/14/2020	Continuous	Met One AIO2	N/A	N/A

SITE NAME: **BEAVER VALLEY**
AQS ID: **420070007**
CBSA: **Pittsburgh MSA**
COUNTY: **BEAVER**
MUNICIPALITY: **CENTER TWP**
LATITUDE: **40.671394**
LONGITUDE: **-80.314264**
ADDRESS: **200 FAIRVIEW DRIVE**
COMMENTS: **Monitors lead concentrations from nearby source**



Monitor Summary

Monitor	*Network*	*Start Date*	*Frequency*	*Method Description*	*Monitoring Scale*	*Appendix D Objectives*
Pb	SLAMS	1/1/2010	1 in 6	ICP-MS	Middle Scale	Source Oriented
VOC	Other	4/1/2017	1 in 6	Canister	N/A	N/A
Metals	Other	2/20/2011	1 in 6	High Volume Sampler with Quartz Filter	N/A	N/A
Meteorology	Other	New 2020	Continuous	Met One AIO2	N/A	N/A

SITE NAME: **BRIGHTON TWP**

AQS ID: **420070005**

CBSA: **Pittsburgh MSA**

COUNTY: **BEAVER**

MUNICIPALITY: **BRIGHTON TWP**

LATITUDE: **40.68547222**

LONGITUDE: **-80.3605**

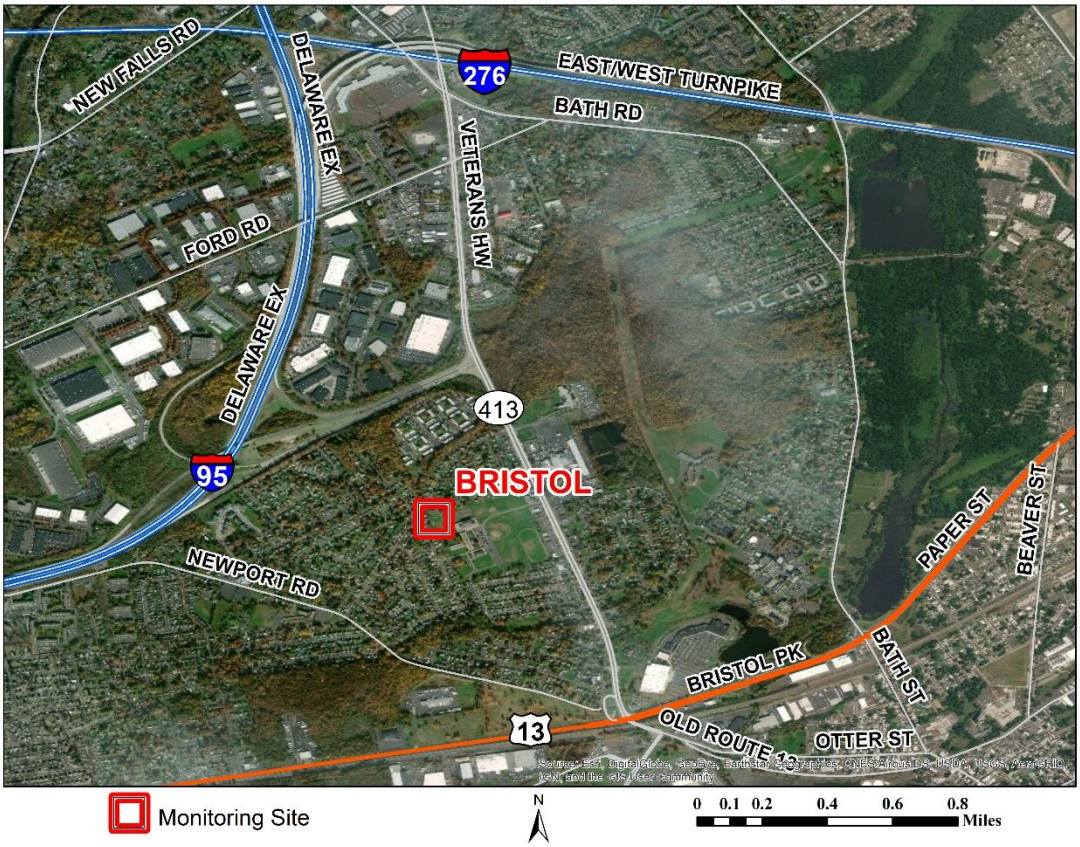
ADDRESS: **1015 SEBRING ROAD**

COMMENTS: **Monitors ozone and SO_2 concentrations within the Ohio River valley**

Monitor Summary

Monitor	*Network*	*Start Date*	*Sample Frequency*	*Method Description*	*Monitoring Scale*	*Appendix D Objectives*
Ozone	SLAMS	4/20/1994	Continuous	UV Absorption	Neighborhood	Population Exposure
SO_2	SLAMS	4/20/1994	Continuous	UV Fluorescence	Neighborhood	Highest Concentration
Meteorology	Other	New 2020	Continuous	Met One AIO2	N/A	N/A

SITE NAME: **BRISTOL**
AQS ID: **420170012**
CBSA: **Philadelphia-Camden-Wilmington MSA**
COUNTY: **BUCKS**
MUNICIPALITY: **BRISTOL TWP**
LATITUDE: **40.10738889**
LONGITUDE: **-74.88247222**
ADDRESS: **ROCKVIEW DRIVE**
COMMENTS: **Monitors downwind concentration of ozone from mobile sources in the Philadelphia metro area**



Monitor Summary

Monitor	*Network*	*Start Date*	*Sample Frequency*	*Method Description*	*Monitoring Scale*	*Appendix D Objectives*
Ozone	SLAMS	1/1/1974	Continuous	UV Absorption	Neighborhood	Max Ozone Concentration
Meteorology	Other	12/4/2019	Continuous	Met One AIO2	N/A	N/A

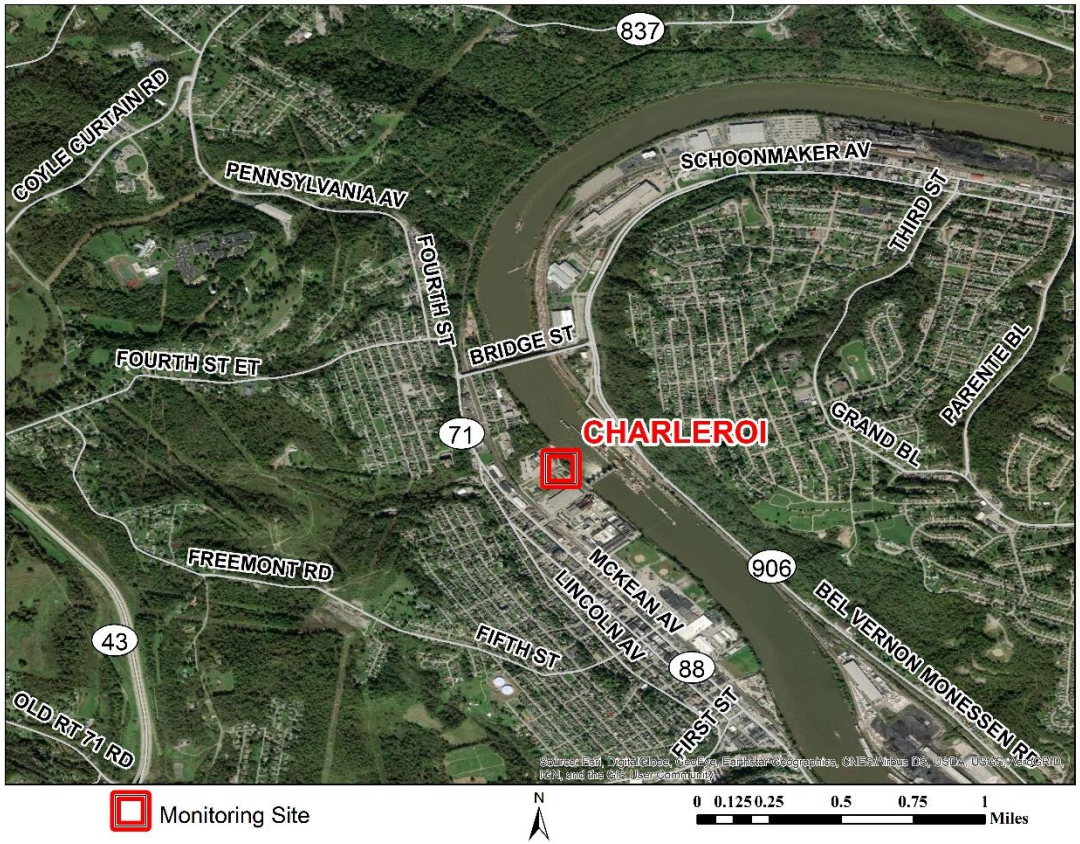
SITE NAME: **CARLISLE**
AQS ID: **420410101**
CBSA: **Harrisburg-Carlisle MSA**
COUNTY: **CUMBERLAND**
MUNICIPALITY: **NORTH MIDDLETON TWP**
LATITUDE: **40.24661111**
LONGITUDE: **-77.18372222**
ADDRESS: **IMPERIAL COURT**
COMMENTS: **Monitors fine particulate matter to meet federal monitoring requirements in the Harrisburg MSA**

Monitor Summary

Monitor	*Network*	*Start Date*	*Sample Frequency*	*Method Description*	*Monitoring Scale*	*Appendix D Objectives*
$PM_{2.5}$	SLAMS	3/29/2001	Daily	Gravimetric	Neighborhood	Population Exposure
$PM_{2.5}$	SLAMS	1/1/2009	Continuous	Beta Attenuation	Neighborhood	Population Exposure
Meteorology	Other	8/23/2019	Continuous	Met One AIO2	N/A	N/A

SITE NAME: **CHARLEROI**

AQS ID: 421250005
CBSA: Pittsburgh MSA
COUNTY: WASHINGTON
MUNICIPALITY: CHARLEROI BORO
LATITUDE: 40.14658333
LONGITUDE: -79.90222222
ADDRESS: CHARLEROI WASTE TREATMENT PLANT
COMMENTS: Monitors for criteria pollutants to meet federal requirements including NAAQS compliance in the Pittsburgh MSA



Monitor Summary

Monitor	*Network*	*Start Date*	*Sample Frequency*	*Method Description*	*Monitoring Scale*	*Appendix D Objectives*
Ozone	SLAMS	1/1/1974	Continuous	UV Absorption	Neighborhood	Population Exposure
SO_2	SLAMS	1/1/1974	Continuous	UV Fluorescence	Neighborhood	Population Exposure
NO_2	SLAMS	1/1/1974	Continuous	Chemiluminescence	Neighborhood	Population Exposure
$PM_{2.5}$	SLAMS	1/12/2016	Daily	Gravimetric	Neighborhood	Population Exposure
$PM_{2.5}$	SLAMS	4/1/2009	Continuous	Beta Attenuation	Neighborhood	Population Exposure
$PM_{2.5}$	SLAMS	12/11/2018	Continuous	Scattered Light Spectrometry	Neighborhood	Population Exposure
VOC	Other	5/31/2009	1 in 6	Canister	N/A	N/A
Meteorology	Other	10/16/2019	Continuous	Met One AIO2	N/A	N/A

SITE NAME: **CHESTER**
AQS ID: **420450002**
CBSA: **Philadelphia-Camden-Wilmington MSA**
COUNTY: **DELAWARE**
MUNICIPALITY: **CITY OF CHESTER**
LATITUDE: **39.83519445**
LONGITUDE: **-75.37211111**
ADDRESS: **FRONT ST & NORRIS ST**
COMMENTS: **Monitors criteria pollutants for NAAQS compliance in the Philadelphia-Camden-Wilmington MSA.**

Monitor Summary

Monitor	*Network*	*Start Date*	*Sample Frequency*	*Method Description*	*Monitoring Scale*	*Appendix D Objectives*
Ozone	SLAMS	1/1/1974	Continuous	UV Absorption	Urban Scale	Population Exposure
NO_2	SLAMS	1/1/1974	Continuous	Chemiluminescence	Neighborhood	Population Exposure
$PM_{2.5}$	SLAMS	4/1/2009	Continuous	Scattered Light Spectrometry	Neighborhood	Population Exposure
$PM_{2.5}$ Speciation	CSN	12/1/2014	1 in 6	Gravimetric	Neighborhood	Population Exposure
Pb	SLAMS	2/1/1994	1 in 6	ICP-MS	Neighborhood	Population Exposure
VOC	Other	1/10/1995	1 in 6	Canister	N/A	N/A
Metals	Other	1/10/1995	1 in 6	High Volume Sampler with Quartz Filter	N/A	N/A
Meteorology	Other	New 2020	Continuous	Met One AIO2	N/A	N/A

SITE NAME: **COLLEGEVILLE**
AQS ID: **420910005**
CBSA: **Philadelphia-Camden-Wilmington MSA**
COUNTY: **MONTGOMERY**
MUNICIPALITY: **COLLEGEVILLE BORO**
LATITUDE: **40.1925**
LONGITUDE: **-75.4575**
ADDRESS: **URSINUS COLLEGE**
COMMENTS: **Monitors for VOCs near source**

Monitor Summary

Monitor	*Network*	*Start Date*	*Sample Frequency*	*Method Description*	*Monitoring Scale*	*Appendix D Objectives*
VOC	Other	5/18/2007	1 in 6	Canister	N/A	N/A
Meteorology	Other	8/12/2019	Continuous	Met One AIO2	N/A	N/A

SITE NAME: **CONEMAUGH**
AQS ID: **421290009**
CBSA: **Pittsburgh MSA**
COUNTY: **WESTMORELAND**
MUNICIPALITY: **ST CLAIR TWP**
LATITUDE: **40.39292**
LONGITUDE: **-79.02446**
ADDRESS: **SUGAR RUN - RT 711**
COMMENTS: **Monitors lead concentrations from nearby source**

Monitor Summary

Monitor	*Network*	*Start Date*	*Sample Frequency*	*Method Description*	*Monitoring Scale*	*Appendix D Objectives*
Pb	SLAMS	1/1/2010	1 in 6	ICP-MS	Middle Scale	Source Oriented

SITE NAME: **ELLWOOD CITY**
AQS ID: **420730011**
CBSA: **New Castle Micropolitan Area**
COUNTY: **LAWRENCE**
MUNICIPALITY: **ELLWOOD CITY BORO**
LATITUDE: **40.859409**
LONGITUDE: **-80.276131**
ADDRESS: **Spring Avenue Ext. & Arch St.**
COMMENTS: **Monitors lead concentrations from nearby source**

Monitor Summary

Monitor	*Network*	*Start Date*	*Sample Frequency*	*Method Description*	*Monitoring Scale*	*Appendix D Objectives*
Pb	SLAMS	1/1/2010	1 in 6	ICP-MS	Middle Scale	Source Oriented
Metals	Other	4/21/2016	1 in 6	High Volume Sampler with Quartz Filter	N/A	N/A

SITE NAME: **ERIE**
AQS ID: **420490003**
CBSA: **Erie MSA**
COUNTY: **ERIE**
MUNICIPALITY: **CITY OF ERIE**
LATITUDE: **42.14197222**
LONGITUDE: **-80.03869444**
ADDRESS: **10TH AND MARNE STREETS**
COMMENTS: **Monitors for NAAQS compliance in the Erie MSA**

Monitor Summary

Monitor	*Network*	*Start Date*	*Sample Frequency*	*Method Description*	*Monitoring Scale*	*Appendix D Objectives*
Ozone	SLAMS	5/18/1988	Continuous	UV Absorption	Neighborhood	Population Exposure
NO_2	SLAMS	5/18/1988	Continuous	Chemiluminescence	Neighborhood	Population Exposure
CO	SLAMS	11/1/2004	Continuous	Non-dispersive Infrared	Neighborhood	Population Exposure
$PM_{2.5}$	SLAMS	7/1/2009	Continuous	Scattered Light Spectrometry	Neighborhood	Population Exposure
PM_{10}	SLAMS	8/10/1995	Continuous	TEOM Gravimetric	Neighborhood	Population Exposure
VOC	Other	12/6/2018	1 in 6	Canister	N/A	N/A
Meteorology	Other	7/10/2019	Continuous	Met One AIO2	N/A	N/A

SITE NAME: **EVANSBURG UNITED METHODIST**
AQS ID: **420910016**
CBSA: **Philadelphia-Camden-Wilmington MSA**
COUNTY: **MONTGOMERY**
MUNICIPALITY: **LOWER PROVIDENCE TWP**
LATITUDE: **40.183056**
LONGITUDE: **-75.434167**
ADDRESS: **3871 GERMANTOWN PIKE**
COMMENTS: **Monitors for VOC's near source**

Monitor Summary

Monitor	*Network*	*Start Date*	*Sample Frequency*	*Method Description*	*Monitoring Scale*	*Appendix D Objectives*
VOC	Other	2/18/2009	1 in 6	Canister	N/A	N/A

SITE NAME: **FARRELL**

AQS ID: **420850100**

CBSA: **Youngstown-Warren-Boardman MSA**

COUNTY: **MERCER**

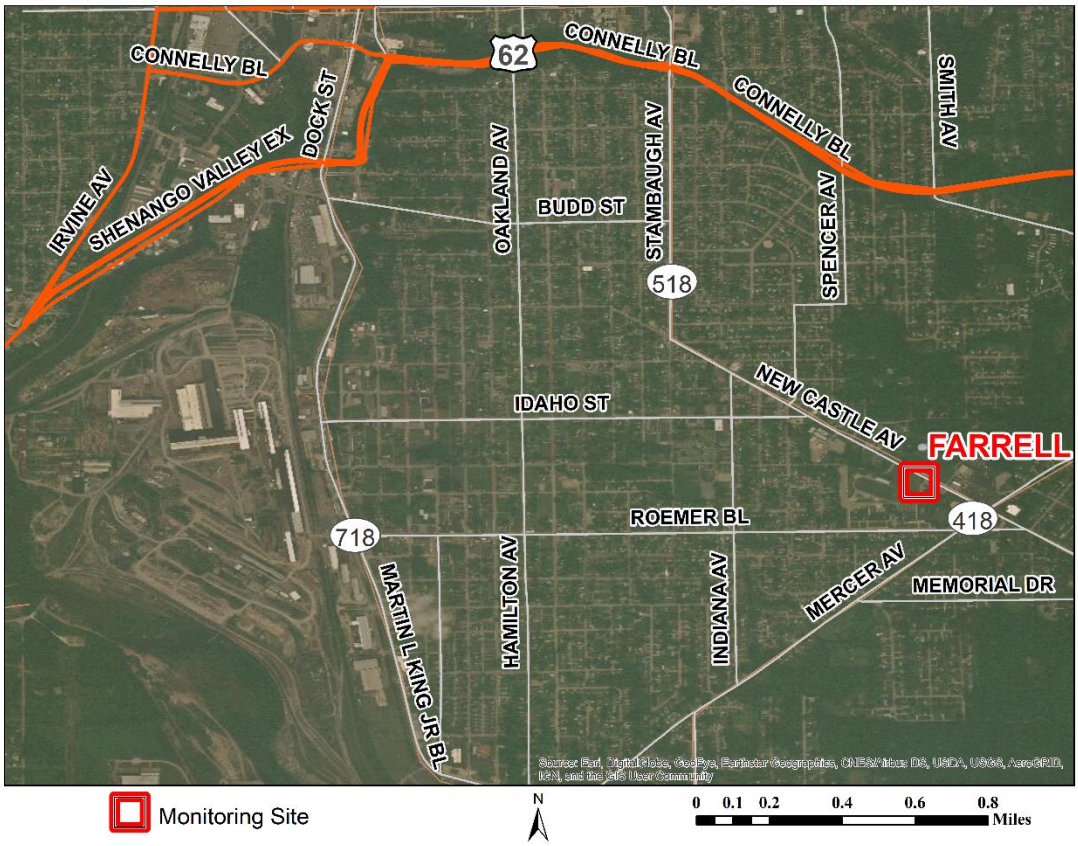
MUNICIPALITY: **CITY OF FARRELL**

LATITUDE: **41.21405556**

LONGITUDE: **-80.48347222**

ADDRESS: **PA518 (NEW CASTLE ROAD) & PA418**

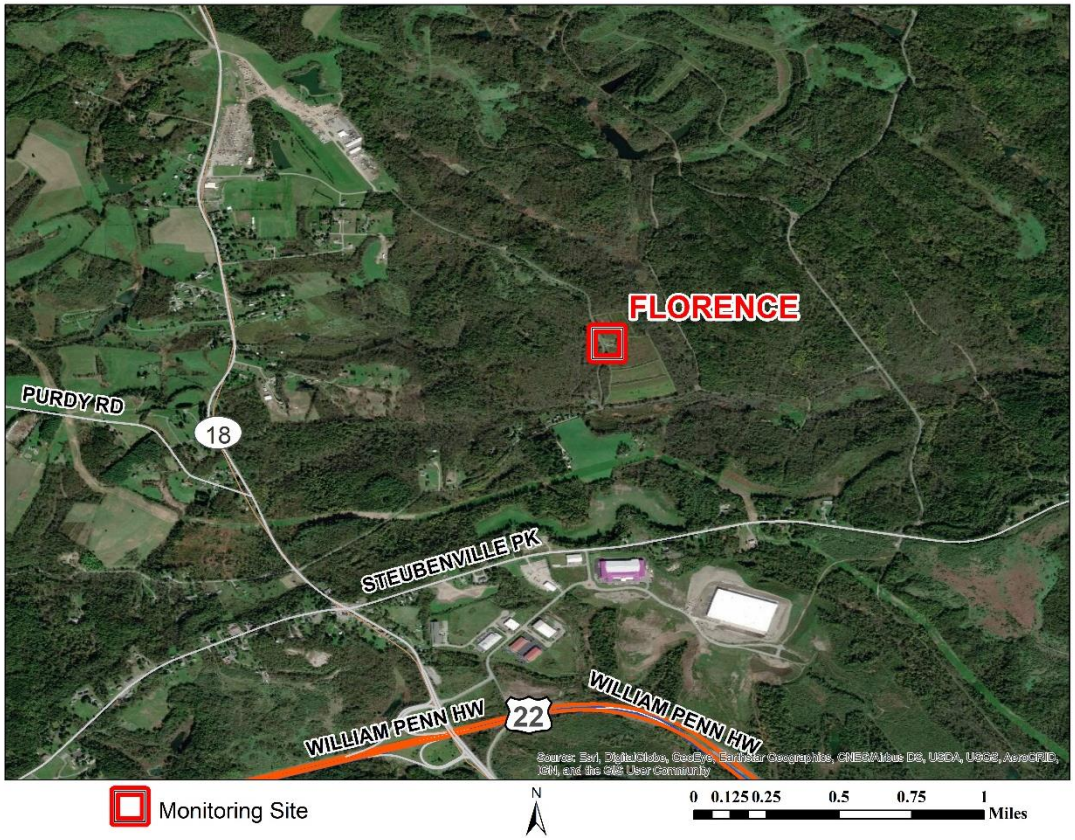
COMMENTS: **Meets federal monitoring requirements in the PA part of the Youngstown-Warren-Boardman MSA**



Monitor Summary

Monitor	*Network*	*Start Date*	*Sample Frequency*	*Method Description*	*Monitoring Scale*	*Appendix D Objectives*
Ozone	SLAMS	9/1/1980	Continuous	UV Absorption	Urban Scale	Max Ozone Concentration
$PM_{2.5}$	SLAMS	11/3/2010	Continuous	Scattered Light Spectrometry	Urban Scale	Population Exposure
Meteorology	Other	1/8/2020	Continuous	Met One AIO2	N/A	N/A

SITE NAME: **FLORENCE**
AQS ID: **421255001**
CBSA: **Pittsburgh MSA**
COUNTY: **WASHINGTON**
MUNICIPALITY: **HANOVER TWP**
LATITUDE: **40.44547222**
LONGITUDE: **-80.42122222**
ADDRESS: **HILLMAN STATE PARK - KINGS CREEK ROAD**
COMMENTS: **Monitors transport of pollutants into PA from upwind areas including Ohio and West Virginia**



Monitor Summary

Monitor	*Network*	*Start Date*	*Sample Frequency*	*Method Description*	*Monitoring Scale*	*Appendix D Objectives*
Ozone	SLAMS	6/8/1995	Continuous	UV Absorption	Regional Scale	Regional Transport
SO_2	SLAMS	1/1/1982	Continuous	UV Fluorescence	Urban Scale	Regional Transport
$PM_{2.5}$	SLAMS	7/1/2009	Continuous	Scattered Light Spectrometry	Regional Scale	General/Background
$PM_{2.5}$ Speciation	CSN	1/1/2002	1 in 6	Gravimetric	Regional Scale	Regional Transport
Meteorology	Other	4/26/2019	Continuous	Met One AIO2	N/A	N/A

SITE NAME: **FREEMANSBURG**

AQS ID: **420950025**

CBSA: **Allentown-Bethlehem-Easton MSA**

COUNTY: **NORTHAMPTON**

MUNICIPALITY: **FREEMANSBURG BORO**

LATITUDE: **40.62847222**

LONGITUDE: **-75.34158333**

ADDRESS: **WASHINGTON & CAMBRIA STS. FREEMANSBURG**

COMMENTS: **Meets federal monitoring requirements in the Allentown-Bethlehem-Easton MSA**

Monitor Summary

Monitor	*Network*	*Start Date*	*Sample Frequency*	*Method Description*	*Monitoring Scale*	*Appendix D Objectives*
Ozone	SLAMS	8/20/1997	Continuous	UV Absorption	Neighborhood	Population Exposure
SO_2	SLAMS	2/22/2018	Continuous	UV Fluorescence	Neighborhood	Population Exposure
NO_2	SLAMS	8/20/1997	Continuous	Chemiluminescence	Neighborhood	Population Exposure
$PM_{2.5}$	SLAMS	2/27/2012	Daily	Gravimetric	Neighborhood	Population Exposure
$PM_{2.5}$	SLAMS	7/1/2009	Continuous	Beta Attenuation	Neighborhood	Population Exposure
Meteorology	Other	9/25/2019	Continuous	Met One AIO2	N/A	N/A

SITE NAME: **GLASGOW**
AQS ID: **420070035**
CBSA: **Pittsburgh MSA**
COUNTY: **BEAVER**
MUNICIPALITY: **GLASGOW BOROUGH**
LATIUTUDE: **40.644637**
LONGITUDE: **-80.508413**
ADDRESS: **UNION LANE**
COMMENTS: **Measures ambient levels of heavy metals near local source**

Monitor Summary

Monitor	*Network*	*Start Date*	*Sample Frequency*	*Method Description*	*Monitoring Scale*	*Appendix D Objectives*
Metals	Other	10/16/2017	1 in 6	High Volume Sampler with Quartz Filter	N/A	N/A
Metals (TSP-based)	Other	10/16/2017	1 in 6	High Volume Sampler with Glass Filter	N/A	N/A
Meteorology	Other	New 2020	Continuous	Met One AIO2	N/A	N/A

SITE NAME: **GREENSBURG**

AQS ID: **421290008**

CBSA: **Pittsburgh MSA**

COUNTY: **WESTMORELAND**

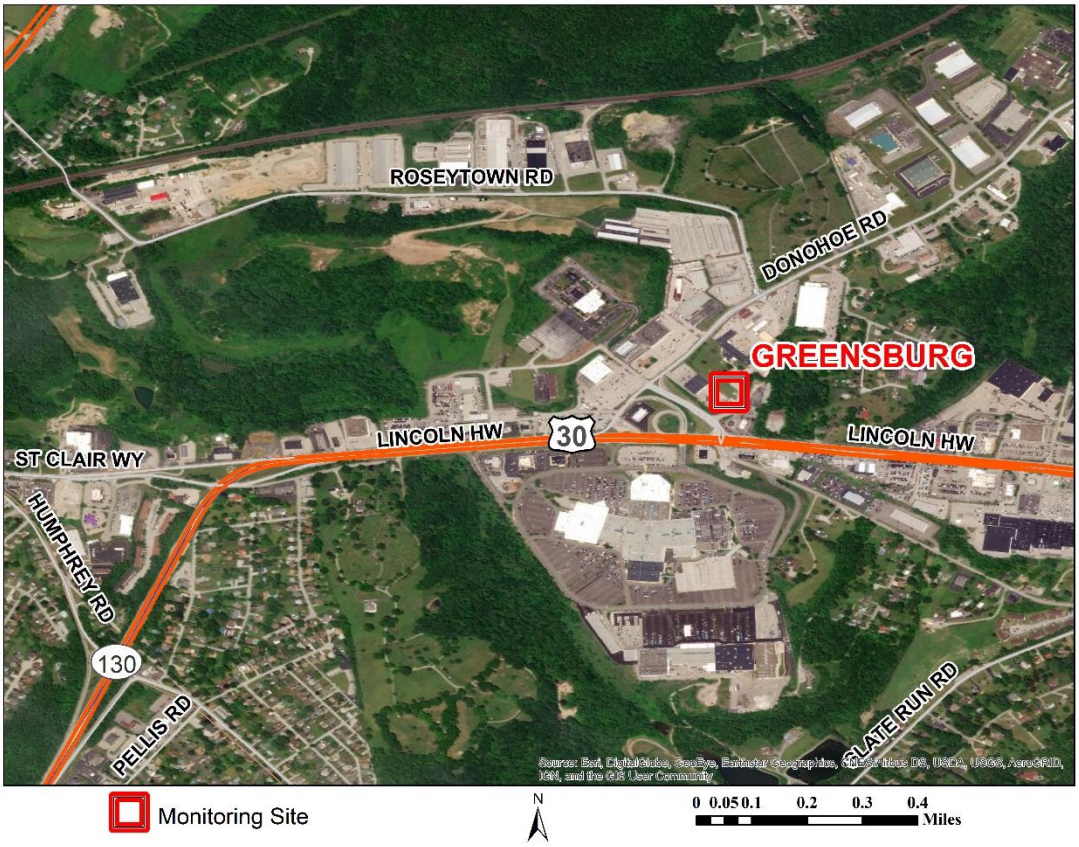
MUNICIPALITY: **HEMPFIELD TWP**

LATITUDE: **40.30438889**

LONGITUDE: **-79.50605556**

ADDRESS: **DONOHOE ROAD - PENN DOT MAINT DIST BLDG**

COMMENTS: **Meets federal monitoring requirements in the Pittsburgh MSA and for NAAQS compliance**



Monitor Summary

Monitor	*Network*	*Start Date*	*Sample Frequency*	*Method Description*	*Monitoring Scale*	*Appendix D Objectives*
Ozone	SLAMS	10/1/1997	Continuous	UV Absorption	Urban Scale	Population Exposure
$PM_{2.5}$	SLAMS	7/1/2009	Continuous	Beta Attenuation	Neighborhood	Population Exposure
$PM_{2.5}$ Speciation	CSN	1/1/2002	1 in 6	Gravimetric	Urban Scale	Population Exposure
VOC	Other	1/2/2010	1 in 6	Canister	N/A	N/A
Meteorology	Other	10/4/2019	Continuous	Met One AIO2	N/A	N/A

SITE NAME: **HARRISBURG**

AQS ID: **420430401**

CBSA: **Harrisburg-Carlisle MSA**

COUNTY: **DAUPHIN**

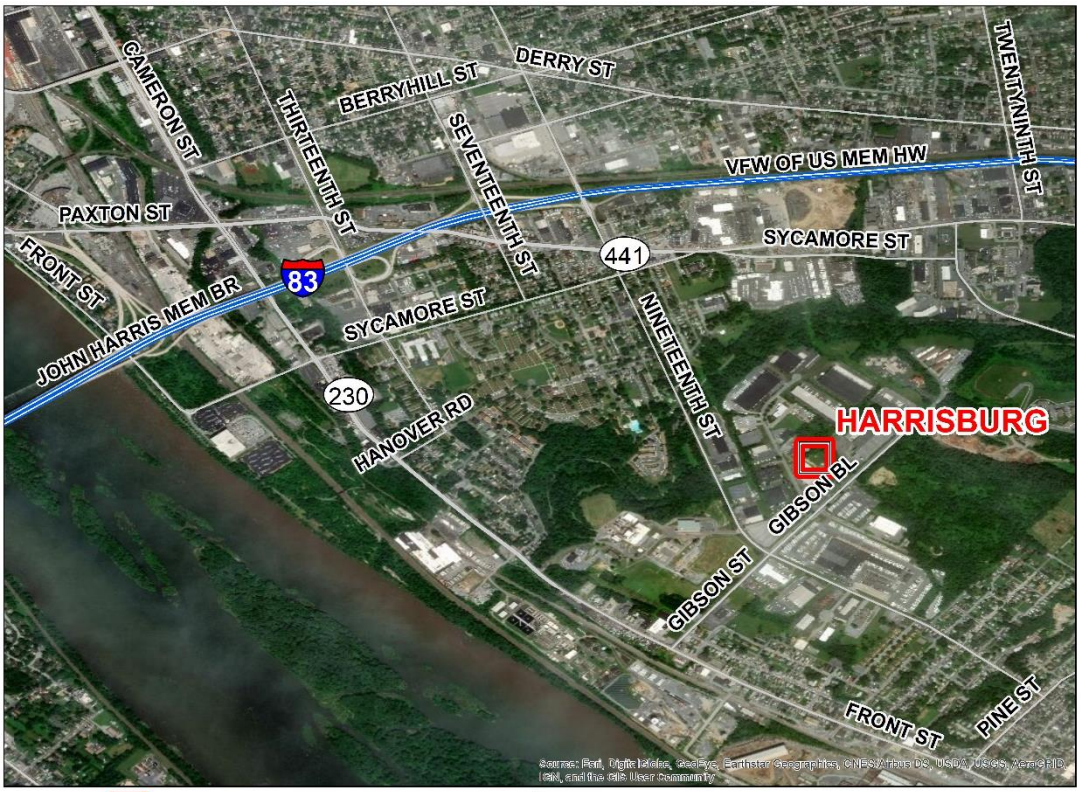
MUNICIPALITY: **SWATARA TWP**

LATITUDE: **40.246992**

LONGITUDE: **-76.846988**

ADDRESS: **651 Gibson Blvd**

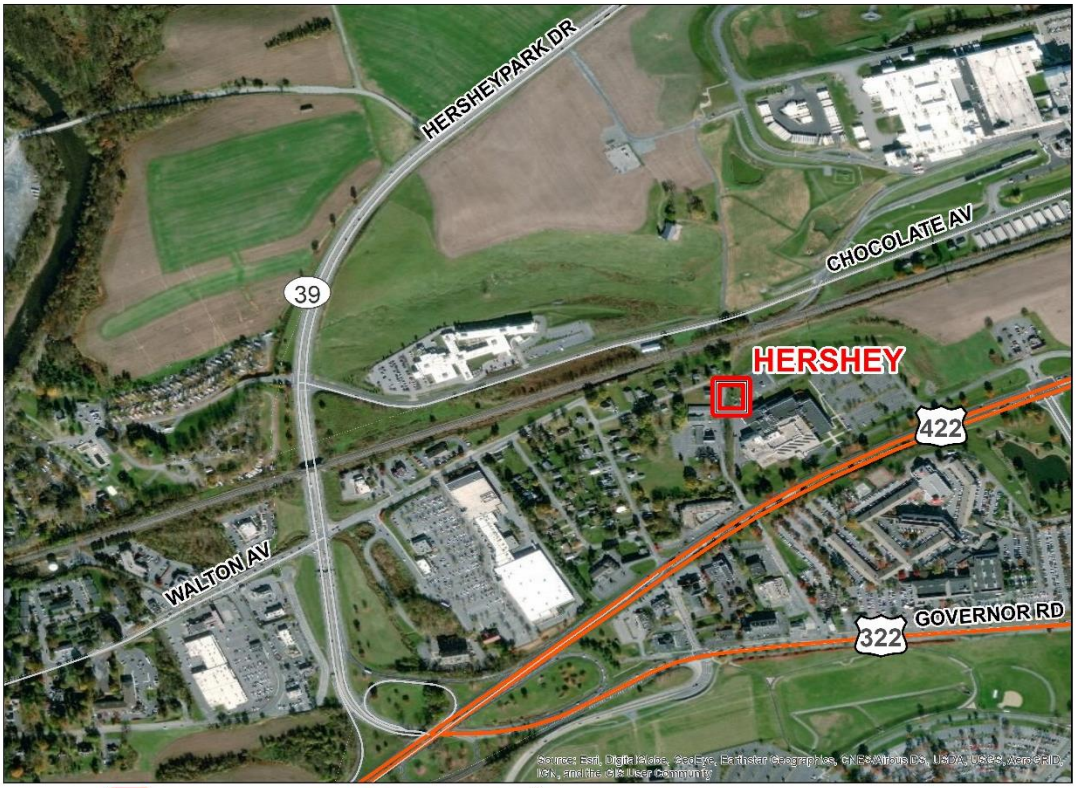
COMMENTS: **Monitors criteria pollutants for NAAQS compliance in the Harrisburg MSA**



Monitor Summary

Monitor	*Network*	*Start Date*	*Sample Frequency*	*Method Description*	*Monitoring Scale*	*Appendix D Objectives*
Ozone	SLAMS	6/1/1978	Continuous	UV Absorption	Neighborhood	Population Exposure
$PM_{2.5}$	SLAMS	1/1/2009	Continuous	Beta Attenuation	Neighborhood	Population Exposure
Meteorology	Other	4/30/2019	Continuous	Met One AIO2	N/A	N/A

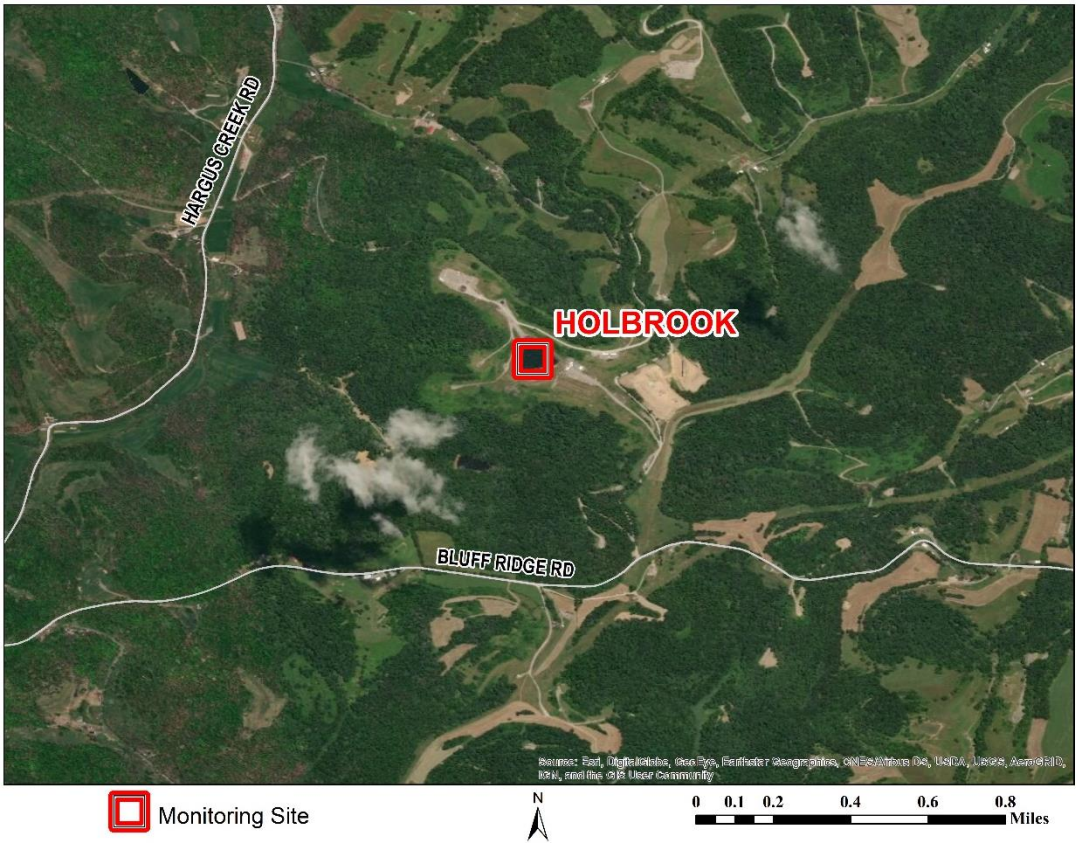
SITE NAME: **HERSHEY**
AQS ID: **420431100**
CBSA: **Harrisburg-Carlisle MSA**
COUNTY: **DAUPHIN**
MUNICIPALITY: **DERRY TWP**
LATITUDE: **40.27241667**
LONGITUDE: **-76.68141667**
ADDRESS: **SIPE AVE & MAE STREET**
COMMENTS: **Monitors criteria pollutants for NAAQS compliance in the Harrisburg MSA; also measures concentrations downwind of the Harrisburg Metro Area**



Monitor Summary

Monitor	*Network*	*Start Date*	*Sample Frequency*	*Method Description*	*Monitoring Scale*	*Appendix D Objectives*
Ozone	SLAMS	8/1/1981	Continuous	UV Absorption	Urban Scale	Max Ozone Concentration
PM_{10}	SLAMS	1/19/2012	Continuous	TEOM Gravimetric	Neighborhood	Population Exposure
Meteorology	Other	8/13/2019	Continuous	Met One AIO2	N/A	N/A

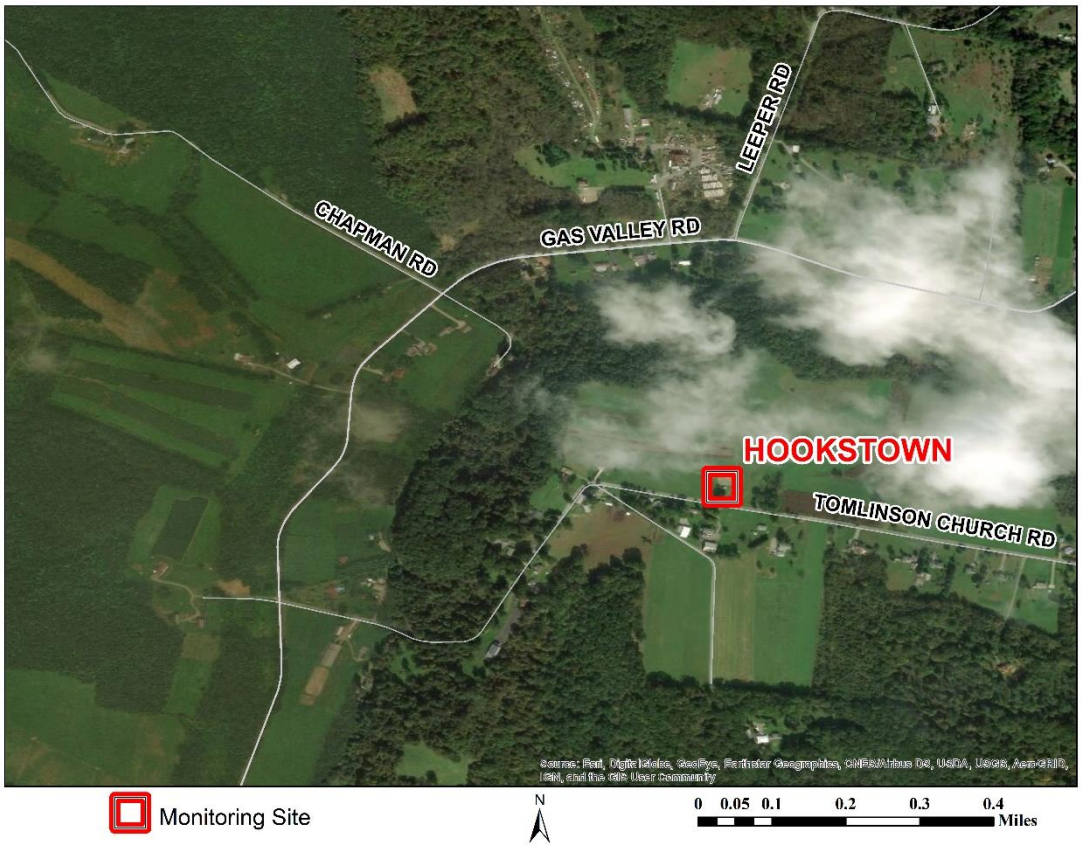
SITE NAME: **HOLBROOK**
AQS ID: **420590002**
CBSA: **Southwest Region - Non-CBSA**
COUNTY: **GREENE**
MUNICIPALITY: **CENTER TWP**
LATITUDE: **39.81602778**
LONGITUDE: **-80.28480556**
ADDRESS: **4.8 KM SE OF HOLBROOK**
COMMENTS: **Monitors transport of pollutants into PA from WV and OH**



Monitor Summary

Monitor	*Network*	*Start Date*	*Sample Frequency*	*Method Description*	*Monitoring Scale*	*Appendix D Objectives*
Ozone	SLAMS	1/1/1997	Continuous	UV Absorption	Regional Scale	Regional Transport
$PM_{2.5}$	SLAMS	1/1/2016	Continuous	Scattered Light Spectrometry	Neighborhood	Source Oriented
Meteorology	Other	10/17/2019	Continuous	Met One AIO2	N/A	N/A

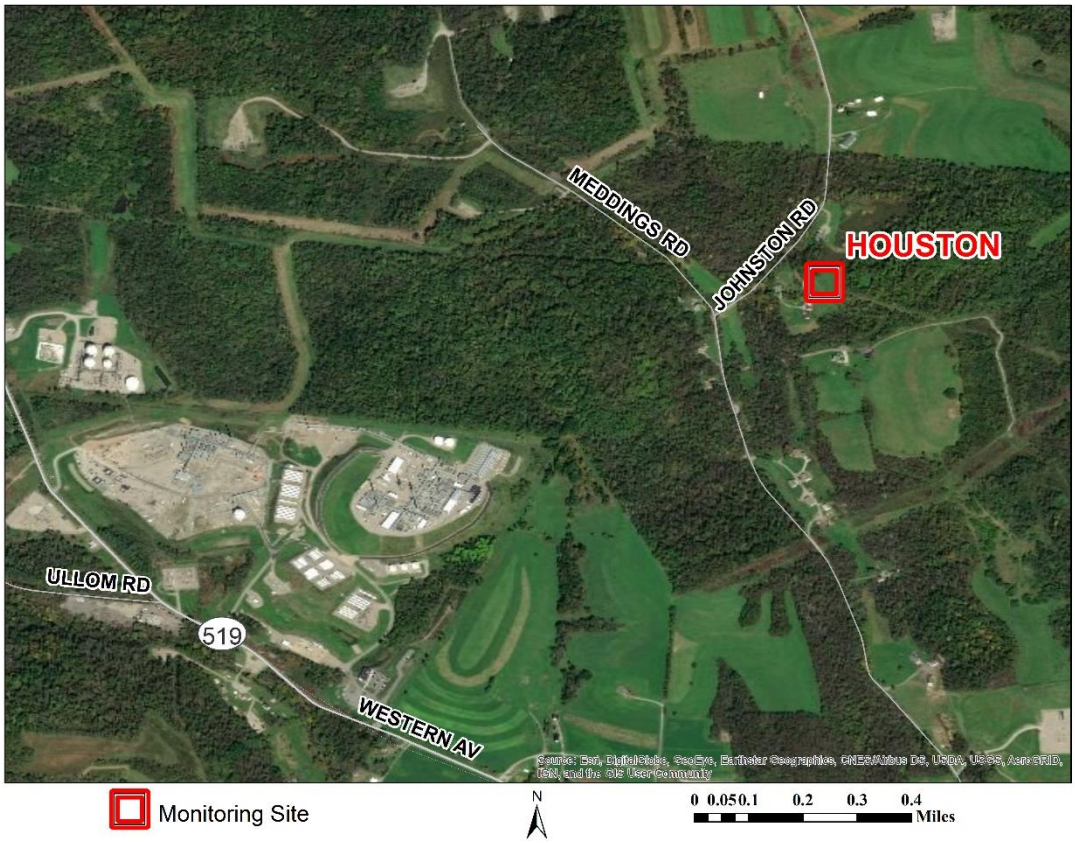
SITE NAME: **HOOKSTOWN**
AQS ID: **420070002**
CBSA: **Pittsburgh MSA**
COUNTY: **BEAVER**
MUNICIPALITY: **GREENE TWP**
LATITUDE: **40.56305556**
LONGITUDE: **-80.50444445**
ADDRESS: **ROUTE 168 & TOMLINSON ROAD**
COMMENTS: **Monitors transport of pollutants into PA from WV and OH**



Monitor Summary

Monitor	*Network*	*Start Date*	*Sample Frequency*	*Method Description*	*Monitoring Scale*	*Appendix D Objectives*
Ozone	SLAMS	6/8/1995	Continuous	UV Absorption	Regional Scale	Regional Transport
SO_2	SLAMS	1/1/1983	Continuous	UV Fluorescence	Urban Scale	Regional Transport
Meteorology	Other	New 2020	Continuous	Met One AIO2	N/A	N/A

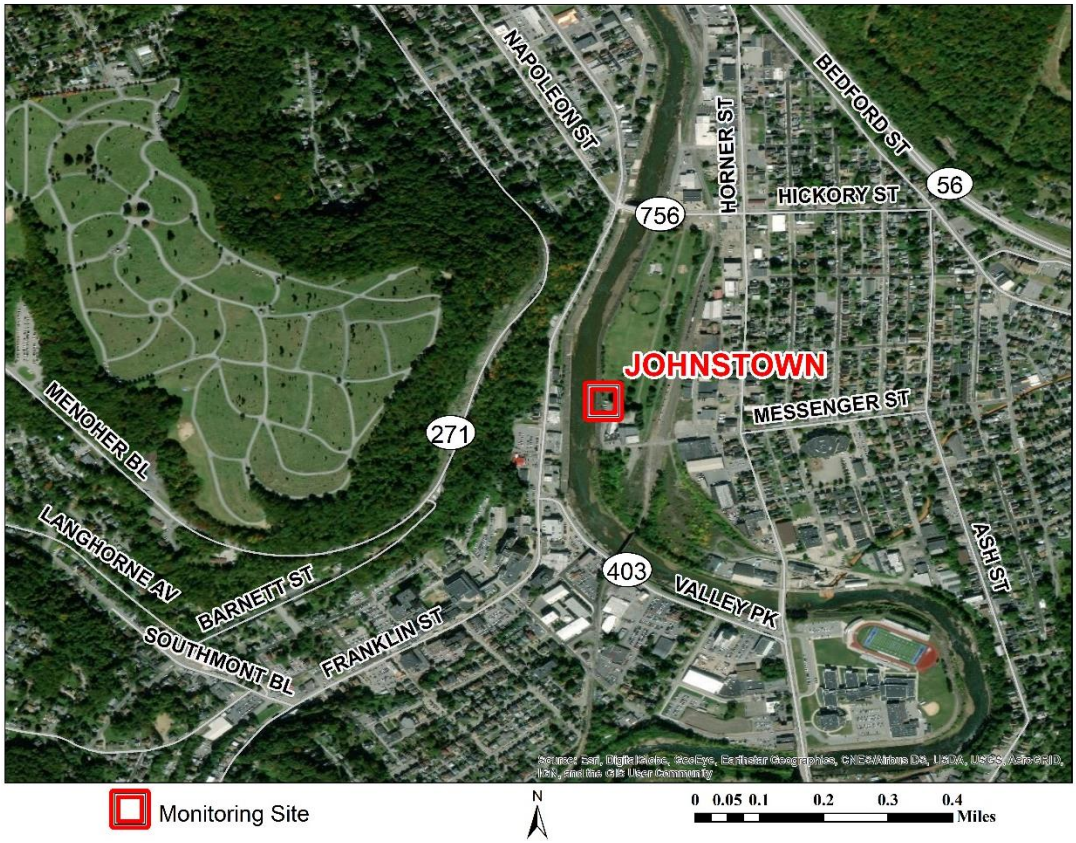
SITE NAME: **HOUSTON**
AQS ID: **421255200**
CBSA: **Pittsburgh MSA**
COUNTY: **WASHINGTON**
MUNICIPALITY: **CHARTIERS TWP**
LATITUDE: **40.269163**
LONGITUDE: **-80.242697**
ADDRESS: **220 MEDDINGS RD**
COMMENTS: **Monitors criteria pollutants and VOC's downwind of natural gas processing facility**



Monitor Summary

Monitor	*Network*	*Start Date*	*Sample Frequency*	*Method Description*	*Monitoring Scale*	*Appendix D Objectives*
Ozone	SLAMS	3/14/2018	Continuous	UV Absorption	Neighborhood	Source Oriented
NO_2	SLAMS	7/23/2012	Continuous	Chemiluminescence	Neighborhood	Source Oriented
$PM_{2.5}$	SLAMS	1/1/2019	Continuous	Scattered Light Spectrometry	Neighborhood	Source Oriented
VOC	Other	7/23/2012	1 in 6	Canister	N/A	N/A
Carbonyls	Other	7/23/2012	1 in 6	DNPH - Coated Cartridges	N/A	N/A
Meteorology	Other	New 2020	Continuous	Met One AIO2	N/A	N/A

SITE NAME: **JOHNSTOWN**
AQS ID: **420210011**
CBSA: **Johnstown MSA**
COUNTY: **CAMBRIA**
MUNICIPALITY: **CITY OF JOHNSTOWN**
LATITUDE: **40.30994445**
LONGITUDE: **-78.91544445**
ADDRESS: **MILLER AUTO SHOP 1 MESSENGER ST**
COMMENTS: **Monitors for NAAQS compliance of criteria pollutants in the Johnstown MSA**



Monitor Summary

Monitor	*Network*	*Start Date*	*Sample Frequency*	*Method Description*	*Monitoring Scale*	*Appendix D Objectives*
Ozone	SLAMS	1/1/1974	Continuous	UV Absorption	Neighborhood	Population Exposure
SO_2	SLAMS	1/1/1974	Continuous	UV Fluorescence	Urban Scale	Population Exposure
NO_2	SLAMS	1/1/1974	Continuous	Chemiluminescence	Neighborhood	Population Exposure
CO	SLAMS	1/1/1978	Continuous	Non-dispersive Infrared	Neighborhood	Population Exposure
$PM_{2.5}$	SLAMS	4/1/2009	Continuous	Scattered Light Spectrometry	Neighborhood	Population Exposure
$PM_{2.5}$ Speciation	CSN	1/26/2009	1 in 6	Gravimetric	Neighborhood	Population Exposure
PM_{10}	SLAMS	4/18/1996	Continuous	TEOM Gravimetric	Neighborhood	Population Exposure
Meteorology	Other	New 2020	Continuous	Met One AIO2	N/A	N/A

SITE NAME: KITTANNING
AQS ID: 420050001
CBSA: Pittsburgh MSA
COUNTY: ARMSTRONG
MUNICIPALITY: EAST FRANKLIN TWP
LATITUDE: 40.814
LONGITUDE: -79.56469445
ADDRESS: GLADE DR. & NOLTE RD. KITTANNING
COMMENTS: Monitors $PM_{2.5}$ and ozone downwind of Pittsburgh MSA

Monitor Summary

Monitor	*Network*	*Start Date*	*Sample Frequency*	*Method Description*	*Monitoring Scale*	*Appendix D Objectives*
Ozone	SLAMS	8/14/1997	Continuous	UV Absorption	Urban Scale	Max Ozone Concentration
$PM_{2.5}$	SLAMS	7/1/2009	Continuous	Beta Attenuation	Urban Scale	Extreme Downwind
Meteorology	Other	New 2020	Continuous	Met One AIO2	N/A	N/A

SITE NAME: **KUTZTOWN**
AQS ID: **420110006**
CBSA: **Reading MSA**
COUNTY: **BERKS**
MUNICIPALITY: **MAXATAWNY TWP**
LATITUDE: **40.51408**
LONGITUDE: **-75.78972**
ADDRESS: **KUTZTOWN UNIVERSITY CAMPUS**
COMMENTS: **Measures downwind ozone concentrations of the Reading metro area**

Monitor Summary

Monitor	*Network*	*Start Date*	*Sample Frequency*	*Method Description*	*Monitoring Scale*	*Appendix D Objectives*
Ozone	SLAMS	9/27/2007	Continuous	UV Absorption	Urban Scale	Extreme Downwind
Meteorology	Other	9/11/2019	Continuous	Met One AIO2	N/A	N/A

SITE NAME: LANCASTER
AQS ID: 420710007
CBSA: Lancaster MSA
COUNTY: LANCASTER
MUNICIPALITY: CITY OF LANCASTER
LATITUDE: 40.04686111
LONGITUDE: -76.28341667
ADDRESS: ABRAHAM LINCOLN JR HIGH GROFFTOWN RD
COMMENTS: Monitors for NAAQS compliance for criteria pollutants in the Lancaster MSA

Monitor Summary

Monitor	*Network*	*Start Date*	*Sample Frequency*	*Method Description*	*Monitoring Scale*	*Appendix D Objectives*
Ozone	SLAMS	1/1/1974	Continuous	UV Absorption	Neighborhood	Population Exposure
$PM_{2.5}$	SLAMS	1/1/1999	Daily	Gravimetric	Neighborhood	Population Exposure
$PM_{2.5}$	SLAMS	11/1/2003	Continuous	Scattered Light Spectrometry	Neighborhood	Population Exposure
$PM_{2.5}$ Speciation	CSN	1/1/2002	1 in 6	Gravimetric	Neighborhood	Population Exposure
PM_{10}	SLAMS	3/22/1995	Continuous	TEOM Gravimetric	Neighborhood	Population Exposure
VOC	Other	5/24/1999	1 in 6	Canister	N/A	N/A
Carbonyls	Other	5/24/1999	1 in 6	DNPH - Coated Cartridges	N/A	N/A
Metals	Other	5/24/1999	1 in 6	High Volume Sampler with Quartz Filter	N/A	N/A
Meteorology	Other	9/18/2019	Continuous	Met One AIO2	N/A	N/A

SITE NAME: **LANCASTER DOWNWIND**

AQS ID: **420710012**
CBSA: **Lancaster MSA**
COUNTY: **LANCASTER**
MUNICIPALITY: **LEACOCK TWP**
LATITUDE: **40.043833**
LONGITUDE: **-76.1124**
ADDRESS: **3445 W. NEWPORT ROAD**
COMMENTS: **Measures downwind ozone concentrations of the Lancaster metro area**

Monitor Summary

Monitor	*Network*	*Start Date*	*Sample Frequency*	*Method Description*	*Monitoring Scale*	*Appendix D Objectives*
Ozone	SLAMS	4/1/2008	Continuous	UV Absorption	Urban Scale	Extreme Downwind
$PM_{2.5}$	SLAMS	1/1/2016	Daily	Gravimetric	Urban Scale	Population Exposure
$PM_{2.5}$	SLAMS	1/1/2014	Continuous	Scattered Light Spectrometry	Urban Scale	Population Exposure
$PM_{2.5}$ Speciation	CSN	11/1/2016	1 in 6	Gravimetric	Urban Scale	Population Exposure
Meteorology	Other	New 2020	Continuous	Met One AIO2	N/A	N/A

SITE NAME: **LAURELDALE NORTH**
AQS ID: **420110020**
CBSA: **Reading MSA**
COUNTY: **BERKS**
MUNICIPALITY: **MUHLENBERG TWP**
LATITUDE: **40.385981**
LONGITUDE: **-75.912856**
ADDRESS: **3139 KUTZTOWN ROAD**
COMMENTS: **Monitors lead concentrations from nearby sources**

Monitor Summary

Monitor	*Network*	*Start Date*	*Sample Frequency*	*Method Description*	*Monitoring Scale*	*Appendix D Objectives*
Pb	SLAMS	1/1/2010	1 in 6	ICP-MS	Middle Scale	Source Oriented

SITE NAME: **LAURELDALE SOUTH**

AQS ID: **420111717**

CBSA: **Reading MSA**

COUNTY: **BERKS**

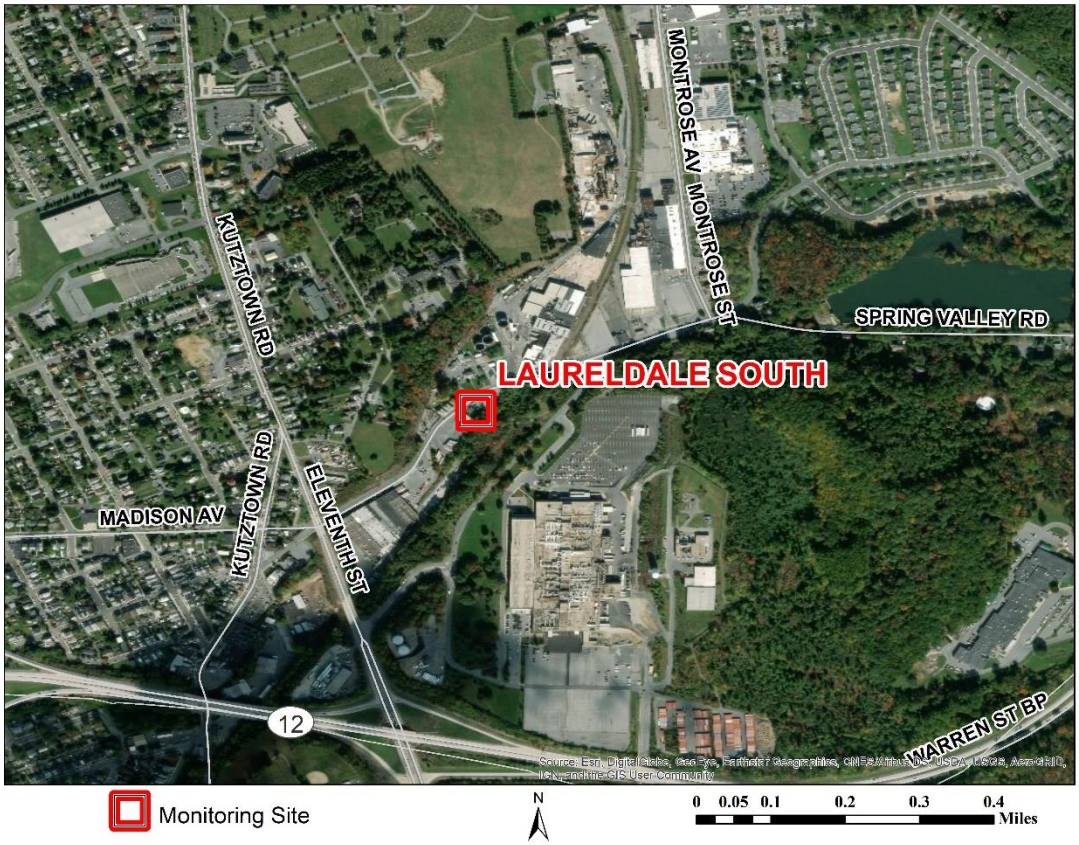
MUNICIPALITY: **MUHLENBERG TWP**

LATITUDE: **40.37730556**

LONGITUDE: **-75.91458333**

ADDRESS: **SPRING VALLEY ROAD**

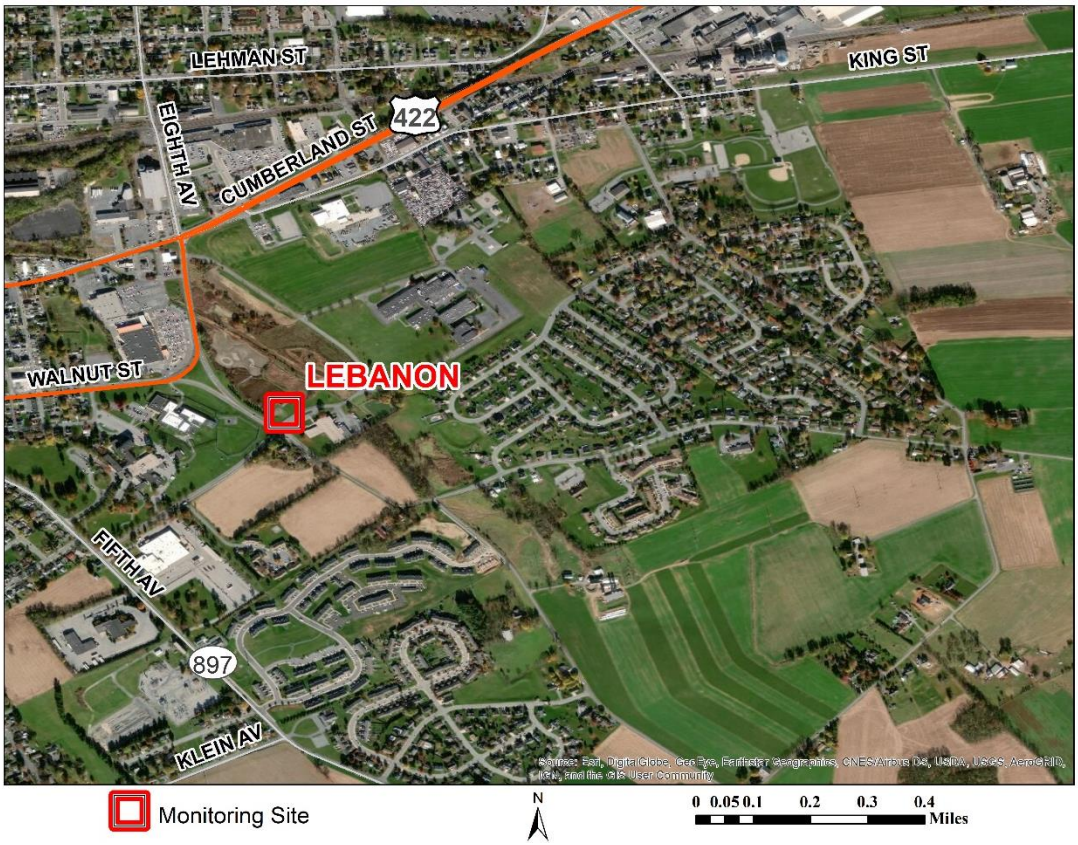
COMMENTS: **Monitors lead concentrations from nearby sources – legacy site**



Monitor Summary

Monitor	*Network*	*Start Date*	*Sample Frequency*	*Method Description*	*Monitoring Scale*	*Appendix D Objectives*
Pb	SLAMS	1/1/1976	1 in 6	ICP-MS	Neighborhood	Source Oriented

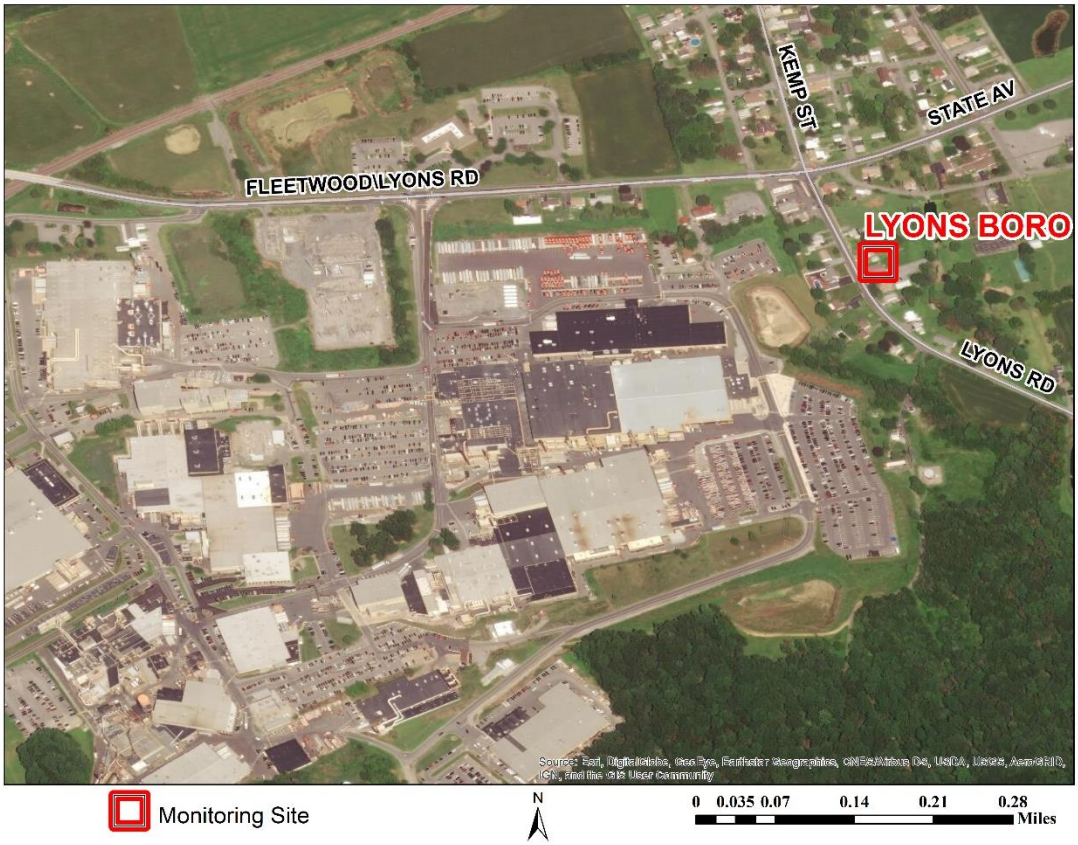
SITE NAME: **LEBANON**
AQS ID: **420750100**
CBSA: **Lebanon MSA**
COUNTY: **LEBANON**
MUNICIPALITY: **SOUTH LEBANON TWP**
LATITUDE: **40.338400**
LONGITUDE: **-76.394585**
ADDRESS: **190 BIRCH RD**
COMMENTS: **Meets federal monitoring requirements in the Lebanon MSA**



Monitor Summary

Monitor	*Network*	*Start Date*	*Sample Frequency*	*Method Description*	*Monitoring Scale*	*Appendix D Objectives*
Ozone	SLAMS	2/25/2011	Continuous	UV Absorption	Urban Scale	Max Ozone Concentration
$PM_{2.5}$	SLAMS	1/7/2016	Daily	Gravimetric	Urban Scale	Population Exposure
$PM_{2.5}$	SLAMS	2/25/2011	Continuous	Beta Attenuation	Urban Scale	Population Exposure
$PM_{2.5}$ Speciation	CSN	1/1/2020	1 in 6	Gravimetric	Urban Scale	Population Exposure
Meteorology	Other	9/5/2019	Continuous	Met One AIO2	N/A	N/A

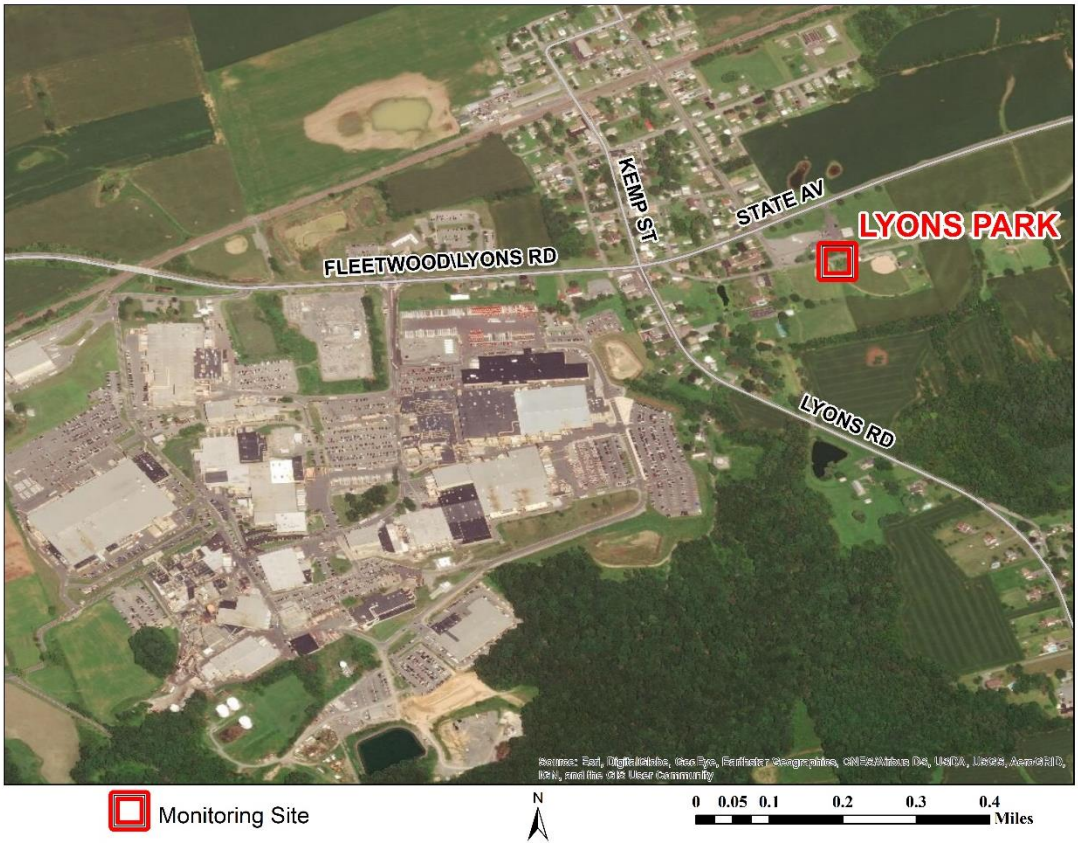
SITE NAME: **LYONS BORO**
AQS ID: **420110021**
CBSA: **Reading MSA**
COUNTY: **BERKS**
MUNICIPALITY: **LYONS BORO**
LATITUDE: **40.477075**
LONGITUDE: **-75.756919**
ADDRESS: **KEMP ST.**
COMMENTS: **Monitors lead concentrations from nearby sources**



Monitor Summary

Monitor	*Network*	*Start Date*	*Sample Frequency*	*Method Description*	*Monitoring Scale*	*Appendix D Objectives*
Pb	SLAMS	1/1/2010	1 in 6	ICP-MS	Middle Scale	Source Oriented

SITE NAME: **LYONS PARK**
AQS ID: **420110022**
CBSA: **Reading MSA**
COUNTY: **BERKS**
MUNICIPALITY: **LYONS BORO**
LATITUDE: **40.478319**
LONGITUDE: **-75.753947**
ADDRESS: **PARK AVE.**
COMMENTS: **Monitors lead concentrations from nearby sources**



Monitor Summary

Monitor	*Network*	*Start Date*	*Sample Frequency*	*Method Description*	*Monitoring Scale*	*Appendix D Objectives*
Pb	SLAMS	1/1/2010	1 in 6	ICP-MS	Middle Scale	Source Oriented